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ON THE ECONOMIC RATIONALE FOR CODETERMINATION LAW

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Abstract

This paper develops a positive economic case for codetermination law resting on the correction of labor and capital market and organizational failures. A legally mandated codetermination structure is shown to provide employee "checks" on several structural incentives for management opportunism. Codetermination is shown to offer advantages for technical efficiency and knowledge generation through its protection of specific human capital investments. Financial markets cannot enforce codetermination due to a set of free rider problems.

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1. Introduction.

Public policies aimed at requiring managers to share authority with employees have been introduced in many countries in recent years. The term codetermination (CD) denotes employee participation in decision-making on the board of directors as well as in the immediate workplace. West Germany is the largest economy in which employees have the legal right to such participation; "codetermination" is a literal translation of the German Mitbestimmung, which carries this dual workplace-board connotation also implied in the paper unless stated otherwise.

German CD laws are complex, have been revised several times, and include the following features. Half of the board members of large firms (over 2000 employees) and one-third in medium size firms (500-2000 employees) are elected by employees (indirectly through a kind of electoral college), while stockholders usually appoint the tiebreaking chairman in large firms. In addition, workers in firms with more than 5 employees have the right to ask for management-employee works councils to arbitrate most aspects of workplace decision making.

Denmark, Sweden, Austria, the Netherlands and Luxembourg have full CD laws while Italy and most of the remaining West European countries (excepting Britain) mandate councils for employee participation at the workplace, though not on the board. In France, employees also send non-voting representatives to the board (for details see Summers (1980, 1982), Kuhne (1980), Aoki (1984), Kolvenbach (1978, 1982), Carby-Hall (1977), and IDE (1981)). In each case, managers retain day-to-day authority to organize production activities and assign employees to tasks.

Thus CD provides what Americans term "checks and balances." More precisely, it is an example of what Arrow (1974, p.77) calls a "responsibility mechanism."

The potential benefits of CD are widely discussed in the economic (and more broadly social science) literature. Theoretical and empirical pieces have argued that workplace and or board participation provides productivity enhancement (Cable and Fitzroy, 1980; Witte, 1981); benefits the industrial relations climate (Bradley and Gelb, 1983); accelerates technical innovation (Vanek, 1971); allows more efficient provision of workplace characteristics (Dreze, 1976); expands skills in democratic processes and participation in community affairs (Pateman, 1970; Dahl, 1985); protects against arbitrary use and abuse of authority when firm-specific skills prevent labor mobility (Putterman, 1982; Dow, 1987); raises output quality (Freund and Epstein, 1984; Streeck, 1984); reduces "workers' exposure to risks outside their control" (Nuti, 1988, p.180); and promotes personal self-esteem and fulfillment among employees (e.g., IDE, 1982).

But it is one thing to state reasonable hypotheses about effects of CD, and even to present statistical evidence in support of these links. It is another thing to conclude that the extent of these contracts and management practices, at least given enough time for firms to adjust, is "too limited" from a positive economics point of view (Furubotn, 1985). It has been argued that if the benefits of CD are internal to the firm, economic selection pressures in either labor or output markets would tend to encourage entry by firms with appropriate contracts and management; this in turn would lead to the bankruptcy of existing firms failing to adapt to the superior organizational form (Jensen and Meckling, 1979).

Further, adjustment costs may slow the adoption of an economically viable innovation that the market will ultimately adopt in full. Diffusion of productive technology (including organization itself) of course takes time. It should not be surprising that the management journals feature numerous articles trumpeting the benefits of "employee involvement," "participative management," "quality circles," "work councils" and other closely related ideas. This itself may be seen as part of the diffusion process. Managers pay for these journals precisely to learn how to better manage in a changing economy. But there are certain structural limitations on the extent of this diffusion process.

This paper considers whether there is a (positive rather than only normative) economic case for some form of CD legislation. In doing so features of specific laws (involving for example unions or dual board levels) are abstracted from to focus on a general economic analysis, on the basis of which specific laws could be evaluated. Thus the following key questions are addressed: 1. Might CD of some type have come about on its own as a result of market forces? 2. What is the effect of legal requirements? 3. Most fundamentally, might market and or organizational failures be responsible for the dearth of market-initiated CD?[1]

2. CD Laws Provide Employee "Checks" on Structural Incentives for Management Opportunism.

The authority held by management to organize the workplace unilaterally has efficiency implications if it distorts the organization of work. In this section, five incentives for managers to distort the organizational structure and other decisions away from efficiency are introduced. The potential for CD to correct these distortions is developed.

The relationships between remuneration schemes, internal organization including the need for various kinds of supervision, the de facto objective(s) of the firm, and any "organizational failures" (Williamson, 1975) are extremely complex (Putterman, 1982, 1984, 1987). It is not adequate to state an individual or joint maximand and study the resulting first order conditions, since objectives, compensation schemes and firm organization are jointly determined and quantitative changes in one of these sets of variables may induce qualitative changes in the others. To make an analysis tractable, however, it will be assumed that the basic productive task of the enterprise, and the job descriptions of the individual employees (such as to produce quality cars or serve the requirements of clients) will not vary with the relative influence of employees in decision-making. Of course, managers, owners and employees may have significantly different interests in the firm; this is what leads effort, broadly construed, to vary according to the reward structure and the corporate organization, and gives rise to management and or employee opportunism.

As Herbert Simon (1976) has stressed, accepting an offer of employment implies an acceptance of authority, albeit for a limited domain. In a modern corporation, few employees receive instructions directly from a company owner. Instead, they are directed by a manager. Although the exact degree of managerial autonomy continues to be disputed, it is clear that managers are in turn answerable to the ultimate owners (private or public) only in a general way (Brudney, 1985). Sufficient specific human capital idiosyncracy ensures that this authority is qualitatively different from what is observed in other market relationships.

Most employees make investments in the organization that employs them. Some will buy shares of stock but most such investments are in the form of specific human capital, or in acquiring knowledge, skills, and even "corporate culture" (Deal and Kennedy, 1982) which increases their productive value to that organization (but not to other organizations). Employees expect to be rewarded in exchange for making such investments, whether this is an explicit agreement or an "implicit contract." Human capital investment contracts may need to be enforced; the legal system in virtually all Western countries recognizes certain rights of employees <u>at least</u> as "affected bystanders"; and moreover, treats the corporation as having responsibilities which extend to the community and the environment as well as employees (for the U.S. case see Summers, 1980, 1982).

It is impractical for employees to quit each time they are asked to do something outside the scope of managerial authority or rewards or promotions are allocated on the basis of criteria unrelated to the tasks of the firm. Even setting aside the opportunity costs of job hunting, employees who feel they are not paid what they are worth may stick with the job knowing they can not do better elsewhere. This is because part of what establishes their economic value in their current workplace is their years of experience building skills and abilities of special value to that firm. And employees who know they could do a better job if they were running their own company often do not exit, for example because of hesitance to take on risk or the presence of various barriers to entry.

The organizational failure problem has probably been stated most succinctly by Dow (1987, p.21-22):

> A recognition that opportunistic behavior can crop up on both sides of the authority relationship...(involves more) than just an awareness that employers and employees alike suffer from the moral flaws of 'human nature as we know it.' The deeper difficulty is that authority relations generate the <u>structural preconditions</u> under which employer opportunism is most likely to be encouraged; namely, information impactedness, small numbers, and availability of a tool (decision by fiat) which is tailor-made for unilateral pursuit of self-interest...what is needed to limit opportunism by authorities is reciprocal monitoring by subordinates and a capacity to impose sanctions when abuses are detected.

Building on such recent developments in economic organization theory, we proceed to offer five incentives for management to distort the organization of work away from efficiency, and the potentially offsetting role of codetermination.

a. <u>Opportunistic credit-taking</u>. Management has a strong incentive to make it appear that innovative ideas originate with the managers rather than their employees; and that they are otherwise more productive than their subordinates. This impression justifies high salary as well as promotions. The latter is very important to managers and employees alike since in most modern corporations of some size, long-term rewards for furthering enterprise goals are more frequently expressed through the promotion than the salary raise within the current position.[3] The ability of managers to create the impression that they are more often the source of productivity and innovation will depend on the organization of the workplace. In making such choices, managers have an <u>incentive</u> to consider their own private benefits and costs rather than those of the enterprise as a whole. Considerable distortions will be possible before the manager's private costs resulting from any overall damage to the firm equal or exceed his private benefits from a more efficient organization, which might, among other things, credit him less for its successes. In the extreme, managers may even have an incentive to create a workplace setting in which employees have no opportunity to put forward innovative ideas and no or even negative incentive to take any number of other productivity-enhancing actions. Since the same set of incentives hold for all managers, the owners of the firm may be able to do little about the problem merely by dismissing management (Dow, 1987, p.24), and in any case micro-monitoring of managers by shareholders is impractical (Coffee, 1986).

The results of such a distorted organizational structure may include reduced incentive for employees to develop and put forward innovative ideas; and false information (or "signals") to higher authorities about the distribution of abilities in the organization. CD provides employees with a regular grievance channel to either higher level managers or to owners; even if not used often it may affect managerial behavior.

b. Time horizon opportunism. In many countries, management careers typically involve working sequentially for a number of companies. Further, senior executives tend to be relatively close to retirement age. The time horizon of capital markets is controversial but arguably indefinite. But the time horizon of management (the presumed agent of capital) is much shorter. Managers' rewards will be based on perceived performance during their tenure. This is a major reason why senior executives are remunerated partly through stock options; but the role of shares in rooting out management opportunism is limited by management risk aversion and the highly imperfect connection between particular managers' performance and share values (influenced both by other managers and exogenous shocks).

The average age of nonmanagerial employees is lower than that of management, and in many cases their median expected stay with the company is longer. One valuable "balance" that CD can offer is to reduce management time horizon opportunism.[4] Managerial actions taken with a short term view to increase management rewards at the expense of the long run viability of the company would be opposed by shareholders and employee board representatives alike, if the information known to employees were available to the board. For such actions violate implicit labor contracts as well as the trust of shareholders. By the time that information on the ability or actions of top management becomes clear to the market in the absence of CD penalties for management may be otherwise outweighed by private benefits of their opportunistic behavior. Presumably, knowledge of these structural incentives reduce investors' willingness to make financial investments as well as employees' willingness to make specific human capital investments.

c. Information flow opportunism. Management has an incentive to provide a less than optimal flow of information, among employees and between owners and employees, for example. Since bargaining power is generally correlated with information, centralization of information, without access to it when necessary, can lead to its hoarding and misuse.

This represents a potentially serious deviation from what might be a first-best outcome, at least from a strictly productive efficiency point of view, of unchecked hierarchy: "It is cheaper and more efficient to transmit all the pieces of information once to a central place than to disseminate each of them to everyone...it may be cheaper for a central individual or office to make the collective decision and transmit it rather than retransmit all the information on which the decision is based" (Arrow, 1974, p.68).

On the other hand Aoki (1984, ch.10) stresses that CD plays a role in ensuring that "managerial information" is received by employees, "an undoubted prerequisite for the approximation of organizational equilibrium (cooperative solution) within the firm." Williamson (1985, pp. 302-304) points out that the availability of "credible" information that CD can provide is especially critical "during periods of actual or alleged adversity" and speculates that "the informational benefits of labor membership (on the board of directors) are not adequately appreciated." These arguments are not mutually inconsistent because Arrow's assumes a first best world and Williamson's and

Aoki's a second best world which allows for the potential of organizational failure.[5]

Efficiency within the enterprise may be characterized as a cooperative game solution among suppliers of the factors of production (Sertel, 1982; Aoki, 1980, 1984; Svejnar, 1982). The (at least partial) shift from a noncooperative to a cooperative mode links CD with higher productivity (Aoki, 1984; Fitzroy and Kraft, 1987). Centralization of information and decision-making will not be efficient if the firm slips into noncooperation as a result. This danger is certainly present when employees realize that managers have the incentive and the means to behave opportunistically.

Tests of the quality of management decisions are of a different nature than tests of product quality, since product markets involves no authority relations, but the labor market does; and because of the frequently long time lag between management decisions and the imperfect measurement of the market reaction to them. A good example of the problem is the common failure of bank managers to write off bad loans in a timely and prudent manner.[6] This decision often becomes apparent only after their tenure, and moreover this represents opportunism toward employees as well as shareholders if it affects the future of investments in firm specific human capital (if layoffs, wage cuts or bankruptcy result).

CD carries risks of informational inefficiency. But in a second-best world in which agents may (be perceived to) have the incentive to behave opportunistically, the more sluggish decision-making apparatus of CD may produce a superior average result by offering an internal quality control mechanism over management decisions.[7] The firm may not introduce it voluntarily because CD is costly to individual managers, who make decisions about internal organization. Although managers may benefit from ensuring that employees receive credible information, they may fear that other functions of CD, including quality control over management decisions, represent a threat to their jobs. Their private risk/reward assessment may lead them to resist CD. Even with a single labor representative on the board, as with the case of Chrysler, board membership may provide a forum for employees to raise issues of managerial incompetence or shirking. Indeed, board membership is a two-way information channel; the reverse channel may be the one management is worried about. Thus, the presence of even non-voting employee board members deprived of full information could lead to improved efficiency.

Unchecked hierarchy systems suffer from a number of disincentives for innovation and specific training. A common employee complaint of management opportunism is that management takes credit for employee innovations. If the two-way communication channels of CD were effective, employees could be more confident that they would reap the rewards (raises, bonuses, promotions, etc.) for their innovations (Smith, 1988). Thus, participation in profits and decision-making are strongly linked (Meade, 1988; Nuti, 1988).

A related complaint is that employees are often "forced to train their bosses," who may be a management trainee or recent transfer. If the employees are effective, the manager may be promoted quickly. The manager thus faces some disincentive against pointing out the subordinates responsible for his success. The employees remain confined to nonmanagerial status. The circumstances may lead employees to withhold information from their supervisors; CD might reasonably lessen the impact of such organization failures.

The fundamental issue is again raised by Dow (1987, p. 24): "who monitors those in positions of authority, in order to ensure that their self-interest does not threaten collective interests?" In the presence of firm-specific human capital and other transaction costs exit or its threat is insufficient. Dow concludes that "the unaided market cannot accomplish" the creation of managerial monitoring by employees "in part because asset idiosyncrasy is often substantial on both sides of the authority relationship, and in part because the relevant information is unlikely to pass easily across organizational boundaries (Teece, 1982), thus disabling reputational protections which might emerge via the managerial labor market."

In summary, unchecked hierarchy might be a first-best solution from the point of view of informational efficiency if not for two distinct problems: (a) managers are fallible and (b) managers have an incentive to behave opportunistically. Indeed, their fallibility increases their incentive to organize the firm and treat information opportunistically. In the presence of these market and organizational failures, CD emerges as a second-best solution. CD cannot solve the "information revelation problem." Employees and owners, as well as managers, have incentives to withhold certain information. But CD is likely to reduce these problems by revealing some information and suggesting to perceptive participants where other information is being distorted or withheld.

d. Authority-hoarding opportunism. In part because of the incentive to create opportunities for management opportunism, and in part the direct managerial utility from authority, CD is a preferred "workplace characteristic" in systematic undersupply, adding to the firm's compensation costs (by convexity of preferences). A relevant result from general equilibrium analysis (Dreze and Hagen, 1978) is that "competitive profit maximization does not imply an efficient choice of working conditions." In this light, CD might lead to a more efficient allocation of job characteristics; indeed, Dreze (1976, p.1130) argues that "labor control over working conditions seems to offer a natural remedy." However, with the exception of CD characteristics, the public goods problem pointed up by Dreze and Hagen might be tackled by some device other than legislated CD.[8] In the course of the detailed argument, an appeal to epidemiological and survey data as preliminary empirical evidence is offered. Surveys show that in the United States, a country without CD laws, CD is favored by most employees (though these surveys did not ask what employees would give up in exchange for such participation). A US Chamber of Commerce-commissioned poll found that 84% of the American workforce would like the chance to participate in management decisions, while a survey by Peter Hart Associates showed that two-thirds of Americans would prefer to work in a participatory environment (Jones 1987, p.493).

Moreover, the incidence of stress has been found to be highest among workers who are rated as having little control over their jobs, other things held constant. This stress has definite medical consequences; a recent study showed that men whose jobs combine high psychological demands with little control over their work face heart attack risk twice to three times as great as other male workers (Karasek, et al, 1988). Stressful occupations included those of cooks, waiters, computer operators, gas station attendants and assembly line workers who had to work quickly and face heavy workloads with little control over one's work to "deal satisfactorily with its psychological demands." In contrast, executive and professional jobs are not considered high stress by these studies because they allow considerable control over ones' work. The market may be particularly unable to communicate employee preferences over job characteristics (such as stress) when they overlap with the characteristic of participation. Why might this workplace characteristic be systematically under-supplied?

Surveys of entrepreneurs indicate that they are motivated at least as much by the goal of controlling an organization as they are in financial rewards (Ronen, 1983).[9] This helps to explain why, when there is entry, it is not more often by codetermined firms (that is, in countries without CD laws). It might not be worth even a considerable sum to some entrepreneurs to alter their managerial style. As an illustrative model, suppose entrepreneurs maximize utility over income and control subject to a transformation locus in which in the relevant range with more control on the part of the entrepreneur, there is also less profitability (because he always "insists on doing things 'his way'"). Then the equilibrium organizational structure is less "participatory" than that consistent with maximum static efficiency (Steinherr, 1977).

It is a cliche that entrepreneurs create firms but cannot manage them; it is natural to assume that decision-making hoarding is just another manifestation of the problem. But Klein (1984) found that even first-line supervisors are strongly resistant to "employee involvement" programs. As she summarizes her surveys, "most revealing, perhaps, is the finding that although nearly three-quarters (72%) of the supervisors view these programs as being good for their companies and more than half (60%) see them as good for employees, less than a third (31%) view them as beneficial to themselves." Among other causes, Klein's surveys point to supervisors' fear of loss of status and power in the workplace. In general, the corporate ladder-climber may be just as motivated by the desire for authority as the entrepreneur (see also Frank, 1985, pp. 136-42; 180). And as Herbert Simon has put it (1976, p.268), "desire for power and concern for personal advancement represent an intrusion of personal goals upon organizational role."

This argument alone does not prove that efficiency would be raised by CD laws. Entrepreneurs might consider starting a firm simply not worth the effort; and with reduced entrepreneurship the ultimate social welfare cost in output of goods and services might be greater than that caused by opportunism and its consequences. It is worthwhile to distinguish between "once for all time" gains from CD due to reallocation of existing resources (static effects) and gains or losses associated with changes in the way productive resources are accumulated (dynamic effects).

Elsewhere we encountered the potential loss of employee-contributed innovations due to the lack of CD. The "entrepreneurs as control-seekers" model raises a potential dynamic cost of CD. A policy of (perhaps partial) exemption from CD laws for a few years for entrepreneurial startups might offer one solution. In any case, any disadvantage individual codetermined firms might face in competing for entrepreneurial talent would be limited if CD were legislated for all firms (Putterman, 1982, p.157).

e. Second-level effects on investment and efficiency. All of the above incentives for management opportunism may adversely affect employee behavior, leading directly or indirectly to increased monitoring costs and expansion of management responsibilities into inefficient domains. Additional organizational distortions follow from management's need to respond to the collapse of cooperation that (potential or actual) opportunism or lack of quality control on decisions may cause. Employees know managers may respond opportunistically to their contributions to the firm (such as by taking credit for these contributions); thus, employees may lower their expectations of their ultimate personal reward for their efforts. This will force management to expend more scarce resources on monitoring, and on taking over certain creative responsibilities for which the comparative advantage may rest with those closely involved in the work. Among other things, this provides an incentive to create excess layers of management.[10]

As the analysis of Hashimoto (1981) implies, even the distrust of management due to its incentive and means "to appropriate a portion of the other party's return" in cases where human capital is firm-specific may lead to inefficient allocation. Underinvestment in firm specific human capital is only one such effect; underinvestment in complementary firm specific physical capital will follow, even if shareholders do not similarly fear management appropriation of their own share. Employee fear that management will unilaterally introduce technological changes which have the effect of undercutting labor's bargaining position can lead to underinvestment in specific human capital (Dow, 1985). The legal protection of CD, by ensuring that management will not renege on agreements with employees, increases employee confidence in their investments in the firm. It would be difficult to achieve this employee confidence without such legal intervention (see also Streeck, 1984, p.417).

Investments in securities are protected by law and regulation. The benefits of doing so for the supply of capital are well understood. If human capital investment were subject to "disclosure" requirements and a viable employee check on management opportunism, its supply might also be expanded. CD laws would help to ensure these attributes within the firm, without resort to direct regulation by government agencies who will be less well informed about workplace conditions. This would in turn allow employees to take a more long term view of the firm's interests, decreasing their incentive to opportunistically seek out short run benefits. The transaction costs for an individual company to set up credible guarantees without an overall legal framework may simply be too high (by analogy consider the lower value of voluntary disclosure of financial information without government auditing and sanction authority).

All forms of wealth are generally subject to some legal protection; specific human capital is a form of social wealth. Managers also gain from the legal protection of specific human capital investments (Coffee, 1986); this effect would appear to complement gains from lowered management shirking and resource diversion. Mandated CD would not eliminate <u>conflicts of protection of financial and specific human capital</u>. But it might be a cost-effective way to expand the protection of wealth, and thereby expand an important type of investment, without recourse to the courtroom. Thus CD could conserve resources otherwise devoted to litigation (as is apparently the case for plant closing and rationalization conflicts in West Germany[11]).

CD is an investment in maintaining internal cooperative solutions. It is difficult to maintain a cooperative solution within firms, as it is among members of a cartel. A continued cooperative solution requires perceived incentives not to depart from the cooperative solution. <u>Organizational investments in ensuring a cooperative game outcome</u> would appear often justified. But perceived incentives for cooperation may require improved information flows and other threats to management opportunities for opportunism (an organizational failure). Like investments in innovation, from the social viewpoint the market is likely to undersupply investments in internal cooperative solutions.

Management has an incentive to create an organization capable of hiding its opportunistic behavior and error. Costs of management opportunism including theft of perks, lowered productivity of employees and lowered firm-specific investment may be compounded by the costs of operating an organizational structure capable of hiding such abuses.

3. Financial markets cannot enforce CD due to free rider problems

The private external benefits of unchecked hierarchy are concentrated in a few managers, while the private external costs are widely scattered among many employees. Each employee has individually relatively little to gain from CD, and each manager has relatively much to lose. Thus pressure to maintain the status quo will be strong. But if the external benefits and costs of CD could somehow be aggregated, it might leave both employees and shareholders better off.

Capital markets face a set of similar problems. Any one shareholder will find very limited private value in trying to influence management or trying to organize all shareholders to do so. Takeovers are costly and risky, and so likely to be effective only in extreme circumstances. And the normal pattern for boards of directors (generally comprised of managers from the company or other companies) is to go out of their way to maintain cordial relations with management. Although hostile takeovers in search of corporations' break-up value emerged in the US in the 1980s, law review articles, courts and the SEC are recognizing numerous harmful effects (inter alia to employees with firm specific human capital). The future of this type of takeover activity, which had slowed dramatically by the end of the decade, is much in doubt. Further, as Brudney (1985, p.1423) concludes, there are fundamental limitations

> on the stockholder's power to choose or police the terms on which management functions or holds office if that choice can only be embodied in the decision to buy or sell corporate stock... it is doubtful that the market can incorporate in stock prices any adequate discount of the risks of dilution of the legal rules

limiting managerial discretion. Hence the price cannot properly reflect stockholder preferences with respect to the appropriate scope of managerial discretion and the concomitant potential for diversion of assets and for operating inefficiently.

The applicability of "nexus of contract" theories (Fama and Jensen, 1983) in this context is thus also fundamentally limited.

Shareholders benefit from CD, on the other hand, because employee board members are able to ask informed questions which require management to defend any questionable actions on a regular basis. Shareholders in any one firm are too diffuse to successfully insist on CD in the face of entrenched management opposition. Shareholders might oppose CD for other reasons, such as a fear of losing bargaining power in an adversarial industrial relations climate. Of course, capital and labor have partially divergent interests in the firm, but the link between CD and an internal cooperative solution is a new idea, probably not well understood by the shareholding public.

Beyond this, the takeover is a very unlikely device for ensuring that CD is introduced when it is economically efficient. It is difficult for outsiders to learn the details of internal organization and opportunism. Moreover, a corporate raider would have a hard time finding a management team committed to making CD work in an economy in which it was not the norm. Even if not for problems of opportunism, there are few managers with such skills in a noncodetermined economy. Training managers in such skills is unlikely to be profitable because of pecuniary externalities of the type stressed in the development literature (see Rosenstein-Rodan, 1943). And unless all (or most) firms introduce CD, management's aversion to it may make it impractical and ultimately unprofitable for one firm to do so. Even if such problems could be overcome, capital markets would have to be convinced to back such an approach. Putterman (1982, p.158) concludes that "if equity owners value their voting control over firm policies...the introduction of any degree of codetermination in a firm previously controlled entirely by capital would produce a... reduction in equity value." This too would make it more costly for the firm to raise capital. But a legal requirement for all firms to introduce CD minimizes such costs. As CD continues to expand internationally, such capital cost effects should continue to shrink. In any case, there is little empirical evidence that small equity holders value voting control as such.

Even allowing the arguments that decision-making and risk-bearing should ceteris paribus be associated, and recalling the natural link between codetermination and gainsharing, if participation in decision-making becomes limited to those who are in a position to take on significant risk, there will be efficiency costs. For if decision skills and place in the internal organization are not the key criteria for selecting decision-making participators, but rather personal wealth or some other factor associated with the ability to bear risk, then some of the organization's assets are being systematically underutilized and underdeveloped.[12] There is no a priori reason to suppose that CD would lower the incentives for financial investment. To the extent management opportunism is curtailed, a cooperative solution encouraged and employee investments expanded, productivity may be expected to rise.

But the extent to which efficiencies due to CD would flow to shareholders directly is not obvious. CD may not be distributionally neutral. Indeed, for the market to accomplish a switch to CD under these circumstances, a mechanism for sidepayments might have to be found. Free rider and collective action problems throw this into doubt. It is beyond the scope of the present study to fully evaluate the distributional implications of CD. Certainly the normative, public benefit arguments upon which CD law has been built in Europe expects some uncompensated transfer of utility to employees, more or less like a progressive tax (Gotthold, 1987).

But one plausible outcome of CD is that shareholders and employees may gain utility while managers lose utility due to the curtailment of management opportunism. This may be compared to the loss of monopoly rents when a natural monopoly is regulated. Management opportunism does not result from voluntary exchange in competitive markets. Thus one need not appeal to the social desirability of "utility redistribution" to support this transfer. Indeed, dynamic efficiency should be enhanced if increases in specific human capital investment (along with decreased management shirking and resource diversion) follow. Specific human capital intensity of production appears to grow secularly in the course of economic development (Smith, 1988), increasing the economic benefits of CD and, to the extent market and organizational failures prevent its timely adoption, making the case for CD law greater as development proceeds. But if the criteria is that no party otherwise be made worse off in utility terms, some one-time transfer to initial managers and (perhaps) to shareholders might be required.

But overall, shareholders clearly gain by enforcing a mechanism by which managers must account for their actions on a regular basis by those in an excellent position to ask pointed questions, and CD seems to provide such a mechanism.

4. Conclusions and Policy Implications

A positive economic case for CD resting on market and organizational failures has been presented, independent of normative economic, legal and social arguments on which the laws have rested to this point. Weights have not been placed on the various failures; continued empirical study is thus important. Arguments for CD laws in cases where specific human capital is not present were not advanced, but the human capital intensivity of production has historically grown and is widely viewed as becoming dramatically more important in the current period. There is always the question: can government improve on the results of market failure with policy? There is always a fear that final legislation may bear little relation to the economic analysis on which it is based. Although CD laws may reduce both employee and management opportunism, there is the two-fold danger that CD laws will be too weak in certain respects to be effective in checking management opportunism on the one hand, and too strong in other respects so as to have negative effects on employee incentives. The market failures examined in this paper are not easy to correct. Great care must be taken in drafting CD legislation. This paper has not concerned itself with specific CD laws, but only with general principles; in particular, we have largely abstracted from the important distinction between workplace and board CD and the explicit role of unions observed in a number of cases. But CD laws, like other laws of contracting, do not have to yield a Pareto optimum to yield a Pareto improvement.[13]

The Coase theorem would suggest that CD might emerge independently of regulation, but management opportunism, transaction costs and inherent limitations on capital markets ensures that it usually does not (or does so only partially).

The diverse systems of CD implemented in the 1970s will provide important information on the functioning of these systems over the long run. Empirical studies of their performance take on great importance; for example, might the investment boom in West Germany, underway well before the East European revolutions, be connected with CD? Pending such studies, a cautious program for countries without CD laws such as the US and Canada would be public funding for extension services which would publicize what is known about CD and provide consulting and training for firms wishing to initiate broader participation of employees in management. Moreover, in half the US states, the term "business opportunity" has been defined in a legal statute, and its use is regulated by state agency. A claim by management that a prospective employee will participate in relevant decisions will be more effective in securing firm specific investments if a concrete meaning of the term is legally guaranteed.

This paper has examined the market failures case for CD. The market may and does generate some CD, but it is likely to systematically "underinvest" in it, as measured by technical efficiency, protection of specific human capital, knowledge generation, capital market efficiency, and preferences for workplace characteristics. A central problem is the incentive for managers to behave opportunistically without a viable responsibility mechanism. Unchecked hierarchy might be a first-best solution from the point of view of informational efficiency if not for two distinct problems: (a) managers are fallible and (b) managers have an incentive to behave opportunistically. Problems of opportunistic credit taking, lowered investment due to incentive incompatibility, time horizon opportunism, opportunism over information flows, authority-hoarding opportunism and costs of increased monitoring, along with the benefits of CD laws in solving them, were considered. CD laws were seen to provide incentives for employee investments in firm-specific human capital and ensuring an internal cooperative equilibrium. Reasons why the problems cannot be solved by the operation of either labor or capital markets were examined. Although legal regulations cannot be expected to solve all of the problems, and while codetermination has certain costs as well as benefits, support for CD law and some modest proposals for countries without them emerged from the study.

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ENDNOTES

1. This stress on efficiency is not intended to deny meaning to purely normative arguments, but to limit the focus of the paper.

2. Although it is striking how many insights can be gained from this strategy: see in particular Steinherr (1977) and Svejnar (1982).

3. This suggests that simple principal-agent models are abstracting from something quite basic to corporate structure. One possibility is that the promotion-based reward system reflects management opportunism toward shareholders (Baker, Jensen and Murphy, 1988). Another is that it represents a complex and not yet well understood partial solution to the long-run risk/incentive tradeoff. Under either interpretation, it appears to also have the unfortunate effect of facilitating management opportunism toward employees.

4. Jensen and Meckling (1979) and Furubotn (1985) have implicitly assumed a first best world in which management is the perfect agent of capital when they argued that CD might have negative time-horizon implications by involving employees with finite horizons in decisions.

5. Note however that later in the monograph, Arrow qualifies the value of authority in economic organizations and points up a role for what he calls "responsibility mechanisms."

6. Thanks are due to Bob Goldfarb for suggesting this example.

7. The political science literature (e.g. Lindblom, 1965) offers analogous arguments about the efficiency benefits of pluralist democracy. Thanks are due to Harvey Feigenbaum for suggesting this analogy.

8. As an illustration, consider mandatory surveys of employee workplace preferences, with tradeoffs against wages in proportion to costs.

9. Here we are primarily concerned with an entrepreneur who probably owns some (but not all) shares of stock or stock options.

10. Without arguing cause and effect, it may not be a coincidence that the share of administrative and managerial personnel in total employees is 2.4% in Sweden, 3.0% in West Germany, but 10.8% in the United States.

11. I would like to thank Ulrich Muckenberger for providing me with the relevant institutional background for these cases.

12. Fama (1980) and Fama and Jensen (1983) make some similar points, though regarding the manager-shareholder relationship.

13. Furobotn (1985, p.32) has argued that "it must be demonstrated that the (CD) program yields greater net advantages than other participatory schemes...the ratio of gains to losses must favor CD over all rival plans." This is too high a hurdle for any existing beneficial legislation or public goods provision to pass.

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